

Response**Remarks**

Claims 1-5, 7, 8 and 14-28 remain in the application. However claims 7, 14, 15 and 20 have been withdrawn. Therefore, claims 1-5, 8, 16, 17, 18, 19 and 21-28 remain for the Examiner's further consideration.

Applicant submitted an Information Disclosure Statement on October 4, 2002, identifying a Russian Patent No. 613,192, with a copy of that patent. Applicant did not submit a concise explanation of the relevance of the Russian Patent because applicant is not in possession of a translation of the Russian Patent. The Russian Patent was cited in the Kontu Patent 5,823,253, of record in this application. Applicant discovered the Russian Patent in a file history thereof which the assignee of this application obtained apparently in connection with another matter. In an effort to bring all relevant, or possibly relevant, prior art to the attention of the Examiner, this Russian Patent was cited in an Information Disclosure Statement. Although applicant does not know its precise relevance, applicant knows of no requirement for obtaining a translation of the reference. Hence the Examiner is respectfully requested to reconsider her refusal to consider this Russian Patent.

The abstract of the disclosure was objected to as too long and accordingly the abstract of the disclosure has been greatly shorted by amendment.

The specification was objected to as failing to provide an antecedent basis for the term "resilient member" at that time recited in some of the claims. The term "resilient member" no longer appears in any of the claims and therefore there should be no objection to the specification.

Claims 1-5, 8, 16 and 28 were objected to because of the use of the term "resilient member". These claims no longer recite the term "resilient member" and hence the rejection has been overcome. In place of the term "resilient member", applicant now refers to a "spring device". There is ample basis for the use of the term "spring device" in the specification (see specification, page 6, lines 13-15) and also in the abstract of the disclosure.

Claims 1-3 were rejected as being anticipated by Rasmussen 6,131,648. Reconsideration of this rejection is respectfully requested.

Claim 1 called for a heat exchanger comprising a housing including a cylindrical shell closed by a top cover member and a bottom cover member, with a plurality of first and second heat transfer plates in the shell, interleaved in an alternating relationship in a plate stack. The plates are formed with channels on opposite sides to provide first and second fluid passages, with the first fluid passages for a first fluid in alternate spaces and the second fluid passages for a second fluid in remaining spaces. An important feature of claim 1 is in the recitation of a spring device located in the housing adjacent to one end of the plate stack supporting the plate stack and compensating for any expansion or contraction of the heat transfer plates along the longitudinal axis of the housing. Nothing similar to this construction is shown in the references.

The Examiner refers to a gasket 152 in Rasmussen. The gasket 152 is not the equivalent of a spring device. The gasket 152 is not located adjacent to one end of the plate stack. Rather, as stated in Rasmussen column 8 beginning at line 21, "the gasketing includes an inner closed loop gasket 152 enclosing the central corrugated portion 154". This gasket of Rasmussen, in addition to not being the equivalent of a spring device, is not at one end of the plate stack. We submit that positioning a member around a stack is not the equivalent of positioning the member at one end of a stack. The gasket 152 is clearly shown in Rasmussen's FIG. 20. Accordingly claim 1 is believed to be allowable.

Claims 2 and 3 depend from claim 1 and are believed to be allowable along with claim 1.

Claims 21-27 were rejected as anticipated by Kontu. Reconsideration of this rejection is respectfully requested.

Claim 21 states that the periphery of the first and second heat transfer plates are spaced from the inner surfaces of the cylindrical shell to provide an inlet chamber and an outlet chamber. The shell of the heat exchanger has a shell inlet for feeding the second fluid into the inlet chamber and from the inlet chamber into the second

fluid passages, and a shell outlet for permitting the second fluid to pass through the second chamber and exit the heat exchanger from the shell outlet. The provision of inlet and outlet chambers in a space between the periphery of the plates and the inner surfaces of the shell, with the inlet chamber connected to the shell inlet and the outlet chamber connected to the shell outlet is different from anything in Kontu. The Examiner states that Kontu has “a shell inlet 18 and a corresponding inlet chamber as shown in FIG. 7; a shell outlet 19 and a corresponding outlet chamber as shown in FIG. 7; seals or welds at circumferences 13 as shown in FIG. 7 dividing a circular area around the plates to provide the inlet and outlet chambers.” In point of fact however, Kontu does not have an “inlet chamber” and an “outlet chamber”, but rather Kontu has a single, continuous circular area or chamber around the plates. The welds 13 connect the peripheral edges of the plates of Kontu and do not divide a circular area around the heat exchanger into inlet and outlet chambers. At least some of the fluid can pass from the inlet 18 to the outlet 19 around the periphery of the plates without ever passing between the plates. There are no separate inlet and outlet chambers in this Kontu.

Claim 22 is dependent on claim 21 and states further that there is a circular area surrounding the plates that is divided by seals to separate the inlet and outlet chambers. Nothing even remotely similar is shown in Kontu. As previously stated, Kontu shows one continuous or single circular area around the plates within the shell, not one that is divided by seals into separate chambers.

Claims 23-27 are dependent indirectly from claim 22 and therefore should be allowable along with claim 22.

Claims 1-3 were rejected as unpatentable over Yeh. Reconsideration of this rejection is respectfully requested.

As previously stated, claim 1 has the important limitation of a spring device in the housing adjacent one end of the plate stack which supports the plate stack to compensate for expansion or contraction of the heat transfer plates. In Yeh, there is a seal 180 between the core 110 and the shell 160 which preferably is of a flexible heat resistant material such as a woven ceramic cloth. The seal is folded over several times to look like a spring but actually it is not a spring. It is nothing more than a

seal. Hence Yeh does not disclose any equivalent of a spring device positioned where applicant's spring device is positioned which has the purpose of compensating for expansion or contraction. Accordingly claim 1 is patentably distinguishable from Yeh.

Claims 2 and 3 are dependent upon claim 1, and should be allowable along with claim 1.

Claims 17-19 have been allowed.

It was indicated that claims 4, 5, 8, 16 and 28 may be allowable, and it is understood that by changing "resilient member" to "spring device" these claims now should in fact be allowed.

It is believed that the application in its present form (only very slightly amended) is allowable, but if there are any remaining issues the Examiner is respectfully requested to place a telephone call to the undersigned attorney.

The Commissioner is hereby authorized to charge any deficiencies, or credit any overpayments associated with this communication to our Deposit Account No. 50-0852. A duplicate copy of this sheet is enclosed.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on October 24, 2005.


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Respectfully submitted,

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